

ABSTRACT OF DISCLOSURE

*Sub A1*

Composition for and method of stimulating growth of plants, e.g. increase in crop production. The composition comprises a carbon skeleton/energy component, typically a sugar or mixture of sugars; a macronutrient component providing the elements nitrogen, phosphorus, potassium and calcium, preferably also magnesium and sulfur; a micronutrient component providing zinc, iron and manganese, preferably also copper, boron, molybdenum and cobalt. The composition also preferably contains a vitamin/cofactor component and an enhancement component. The composition may be in the form of an aqueous solution or in a form suitable for coating seeds or coating pollen. It may be applied as a foliar spray, as a soil amendment, as a root dip or as an injectable solution. Preferably where, for example, it is used as a foliar spray it is applied at intervals at different stages of growth.

The method is useful for treating vegetation to promote plant growth and/or crop production, also for treating pollen, seeds, roots and soil and inhibiting growth of insects and micro-organisms. A formulation including an energy/carbon skeleton component, a macro nutrient component and a micro nutrient component is applied, e.g. in aqueous solution by foliar spraying. This is done in a manner to make optimum use of the inherent ability of vegetation to harvest solar energy and to utilize other sources of energy and carbon skeleton, such that the energy and nutrients applied by the method of the invention is a fraction of the energy and carbon skeleton requirements of the vegetation.